

572

FILE 'HOME' ENTERED AT 18:11:08 ON 09 SEP 2004

L3 633 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
OR CONJUGAT! OR LYSINE OR D-ALA! OR MALAMID! OR ALBUMIN)  
L4 745 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
OR CONJUGAT! OR LYSINE OR D-ALA! OR MALEIMID! OR ALBUMIN)  
L5 677 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
OR CONJUGAT! OR ALBUMIN)  
L9 425 L4 AND DERIVATIVE (S) (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A)  
LIKE)

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(FILE 'HOME' ENTERED AT 18:11:08 ON 09 SEP 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,  
AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS,  
BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 18:11:23 ON 09 SEP 2004

L1 SEA (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)  
QUE (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)

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368 FILE ADISCTI  
41 FILE ADISINSIGHT  
31 FILE ADISNEWS  
110 FILE AGRICOLA  
8 FILE ANABSTR  
1 FILE ANTE  
69 FILE AQUASCI  
34 FILE BIOBUSINESS  
26 FILE BIOCOMMERCE  
23 FILE BIOENG  
3353 FILE BIOSIS  
126 FILE BIOTECHABS  
126 FILE BIOTECHDS  
807 FILE BIOTECHNO  
424 FILE CABA  
233 FILE CANCERLIT  
2904 FILE CAPLUS  
21 FILE CEABA-VTB  
1 FILE CEN  
68 FILE CIN  
51 FILE CONFSCI  
1 FILE CROPB  
7 FILE CROPU  
101 FILE DISSABS  
49 FILE DDFB  
590 FILE DDFU  
4838 FILE DGENE  
49 FILE DRUGB  
68 FILE IMSDRUGNEWS  
625 FILE DRUGU  
50 FILE EMBAL  
2509 FILE EMBASE  
1298 FILE ESBIODASE  
71 FILE FEDRIP  
35 FILE FROSTI

10 FILE FSTA  
 234 FILE GENBANK  
 1 FILE HEALSAFE  
 450 FILE IFIPAT  
 143 FILE JICST-EPLUS  
 360 FILE LIFESCI  
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 2356 FILE MEDLINE  
 2 FILE NIOSHTIC  
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 13 FILE OCEAN  
 1133 FILE PASCAL  
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 1 FILE PHIC  
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 1 FILE RDISCLOSURE  
 3186 FILE SCISEARCH  
 1 FILE SYNTHLINE  
 710 FILE TOXCENTER  
 1243 FILE USPATFULL  
 118 FILE USPAT2  
 1 FILE VETB  
 450 FILE WPIDS  
 4 FILE WPIFV  
 450 FILE WPINDEX  
 24 FILE BABS  
 74 FILE CBNB  
 1 FILE DIOGENES  
 854 FILE INVESTEXT  
 38 FILE IPA  
 3 FILE NAPRALERT  
 1 FILE USAN  
 L1 QUE (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)  
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FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, BIOTECHNO' ENTERED AT  
 18:14:52 ON 09 SEP 2004

L2 15115 S L1  
 L3 633 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
 L4 745 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
 L5 677 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE  
 L6 163 S L5 AND ((BLOOD OR SERUM) (3N) PROTEIN) OR ALBUMIN)  
 L7 73 DUP REM L6 (90 DUPLICATES REMOVED)  
 L8 32 S L7 NOT PY>2000  
 L9 425 S L4 AND DERIVATIVE (S) (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A  
 L10 19 S L9 AND (LYSINE OR D-ALA!))  
 L11 14 DUP REM L10 (5 DUPLICATES REMOVED)

L8 ANSWER 1 OF 32 MEDLINE on STN  
 AN 2000256912 MEDLINE  
 DN PubMed ID: 10794683  
 TI Potent **derivatives** of **glucagon-like**  
 peptide-1 with pharmacokinetic properties suitable for once daily  
 administration.  
 AU Knudsen L B; Nielsen P F; Huusfeldt P O; Johansen N L; Madsen K; Pedersen  
 F Z; Thogersen H; Wilken M; Agerso H  
 CS Department of Molecular Pharmacology, Health Care Discovery and  
 Preclinical Development, Novo Nordisk A/S, Novo Park, DK-2760 Maaloev,  
 Denmark.. lbkn@novo.dk  
 SO Journal of medicinal chemistry, (2000 May 4) 43 (9) 1664-9.  
 Journal code: 9716531. ISSN: 0022-2623.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200006  
 ED Entered STN: 20000706  
 Last Updated on STN: 20000706  
 Entered Medline: 20000629  
 AB A series of very potent **derivatives** of the 30-amino acid peptide  
 hormone **glucagon-like** peptide-1 (**GLP**-  
 1) is described. The compounds were all derivatized with fatty  
 acids in order to protract their action by facilitating binding to serum  
**albumin**. **GLP-1** had a potency (EC(50)) of 55  
 pM for the cloned human **GLP-1** receptor. Many of the  
 compounds had similar or even higher potencies, despite quite large  
 substituents. All compounds derivatized with fatty acids equal to or  
 longer than 12 carbon atoms were very protracted compared to **GLP**  
 -1 and thus seem suitable for once daily administration to type  
 2 diabetic patients. A structure-activity relationship was obtained.  
**GLP-1** could be derivatized with linear fatty acids up to  
 the length of 16 carbon atoms, sometimes longer, almost anywhere in the  
 C-terminal part without considerable loss of potency. Derivatization with  
 two fatty acid substituents led to a considerable loss of potency. A  
 structure-activity relationship on derivatization of specific amino acids  
 generally was obtained. It was found that the longer the fatty acid, the  
 more potency was lost. Simultaneous modification of the N-terminus (in  
 order to obtain better metabolic stability) interfered with fatty acid  
 derivatization and led to loss of potency.

L8 ANSWER 28 OF 32 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.  
 on STN  
 AN 95:323719 SCISEARCH  
 GA The Genuine Article (R) Number: QW584  
 TI PHYSIOLOGICAL AUGMENTATION OF AMINO ACID-INDUCED INSULIN-SECRETION BY GIP  
 AND GLP-I BUT NOT BY CCK-8  
 AU FIESELER P; BRIDENBAUGH S; NUSTEDE R; MARTELL J; ORSKOV C; HOLST J J;  
 NAUCK M A (Reprint)  
 CS RUHR UNIV BOCHUM, KNAPPSCHAFTS KRANKENHAUS, DEPT MED, SCHORNAU 23-25,  
 D-44892 BOCHUM, GERMANY (Reprint); UNIV GOTTINGEN, DEPT SURG, DEPT MED,  
 DIV GASTROENTEROL & ENDOCRINOL, D-37075 GOTTINGEN, GERMANY; UNIV  
 COPENHAGEN, PANUM INST, DEPT MED ANAT, DK-2200 COPENHAGEN, DENMARK; UNIV  
 COPENHAGEN, PANUM INST, DEPT PHYSIOL, DK-2200 COPENHAGEN, DENMARK  
 CYA GERMANY; DENMARK  
 SO AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM, (MAY 1995)  
 Vol. 31, No. 5, pp. E949-E955.  
 ISSN: 0193-1849.

DT Article; Journal  
FS LIFE  
LA ENGLISH

REC Reference Count: 34

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB It was the aim of this study to test insulinotropic actions of cholecystokinin octapeptide (CCK-8), gastric inhibitory polypeptide (GIP), and **glucagon-like** peptide I (GLP-I)-(7-36) amide at basal glucose but physiologically elevated amino acid concentrations. Therefore, in nine fasting healthy volunteers, an amino acid mixture was infused intravenously (12.6 g/h over 120 min). On separate occasions, from 30 to 120 min, placebo (0.9% NaCl-1% human serum **albumin**), synthetic sulfated CCK-8 (0.5 pmol . kg(-1). min(-1)), human GIP (1 pmol . kg(-1). min(-1)), or GLP-I-(7-36) amide (0.3 pmol . kg(-1). min(-1)) was infused intravenously to mimic physiological increments after a meal. The amino acid infusion lead to a small increment in plasma glucose from 4.8 +/- 0.2 to 5.0 +/- 0.2 mmol/l and significantly elevated insulin and C-peptide concentrations. GIP and GLP-I-(7-36) amide further stimulated insulin (1.8-fold, P = 0.0001 and 0.004, respectively) and C-peptide (1.3-fold, P = 0.0003 and 0.013, respectively), with a subsequent slight reduction in plasma glucose (P < 0.0001). Insulin and C-peptide then decreased again in parallel. CCK-8 was without effect on insulin and C-peptide levels. In conclusion, GIP and GLP-I-(7-36) amide are not only able to interact with elevated plasma glucose but are insulinotropic also with physiologically raised amino acid concentrations. Such an interaction could play a role after the ingestion of mixed meals. Cholecystokinin, on the other hand, is not a physiological incretin also under these conditions.

L8 ANSWER 29 OF 32 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
AN 1999:29454457 BIOTECHNO  
TI New developments in the treatment of type 1 diabetes mellitus  
AU Haak T.

CS Dr. T. Haak, Diabetes-Schulungszentrum, Medizinische Klinik I, Klin.  
Johann Wolfgang Goethe-Univ., Theodor-Stern-Kai 7, D-60590 Frankfurt am  
Main, Germany.

E-mail: DSZ-Haak@em.uni-frankfurt.de

SO Experimental and Clinical Endocrinology and Diabetes, (1999), 107/SUPPL.  
3 (S108-S113), 38 reference(s)  
CODEN: ECEDFQ ISSN: 0947-7349

DT Journal; Conference Article

CY Germany, Federal Republic of

LA English

SL English

AB Treatment of type 1 diabetes mellitus has made tremendous advances within the last decades. With concern to insulin delivery there are two promising new approaches. One is the intrapulmonary insulin delivery which has become feasible by the development of new inhalation devices which provide a sufficient degree of intrapulmonary drug retention. Also oral insulin delivery seems feasible when surface active substances are used to cross the mucosal membrane in the gut. Clinical research has also focussed on coatings for the insulin molecules to solve the problem raised by the proteolytic activity of the digestive system. A very new agent produced by a fungus called Pseudomassaria has been demonstrated to reverse the clinical signs of diabetes mellitus in mice. The compound diffuses through the cell membrane, binds to the inner part of the insulin receptor and activates the insulin typical biological effects. Nowadays a variety of insulin analogs are designed and tested for their clinical use. By shifting the isoelectric point towards to a slightly acidic pH, HOE 901 precipitates at physiologic pH resulting in a constant and peakless insulin delivery. NN 304 is a 14-carbon aliphatic fatty acid

acylated analog that binds to serum **albumin** resulting in a flatter time-action profile than NPH insulin. Also rapid acting insulin analogs are or will be launched in the near future aiming to ensure an improved postprandial glucose regulation. **Glucagon-like peptide-1 (GLP-1)** improves metabolic control by a variety of effects, e. g. the enhancement of insulin secretion and inhibition of glucagon secretion. Moreover, **GLP-1** reduces food and water intake controlled by the brain, and inhibits gastric emptying. A disadvantage of **GLP-1** is its very short half-life. Novel **derivatives** with the beneficial effects of **GLP-1** but a better resistance against degradation have been designed. In addition substances have been developed inhibiting **GLP-1** degradation or augmenting **GLP-1** release from its abundant endogenous pool. Finally, there is a variety of interesting approaches aiming to improve or ease blood glucose self-monitoring. One is the development of subcutaneous catheters for continuous blood glucose control. In another system reverse iontophoresis is used for sampling interstitial fluid which reflects capillary blood glucose levels. Instead of using an electric current, a brandnew system creates micropores in the skin by a laser ablation system. Through these micropores a specific device performs a mild suction to obtain interstitial fluid. Further systems which measure blood glucose by near infrared spectroscopy are still investigated in order to improve their technical function and to reduce their weight. This article intends to give an overview over the new developments in the treatment and management of type-1-diabetes mellitus.

(GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)

L11 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
AN 2004:626165 CAPLUS  
TI Identification of CJC-1131-**albumin** bioconjugate as a stable and  
bioactive **GLP-1**(7-36) analog  
AU Leger, Roger; Thibaudeau, Karen; Robitaille, Martin; Quraishi, Omar; van  
Wyk, Pieter; Bousquet-Gagnon, Nathalie; Carette, Julie; Castaigne,  
Jean-Paul; Bridon, Dominique P.  
CS Research Department, ConjuChem Inc., Montreal, QC, H2X 3Y8, Can.  
SO Bioorganic & Medicinal Chemistry Letters (2004), 14(17), 4395-4398  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier B.V.  
DT Journal  
LA English  
AB A series of analogs of **GLP-1**(7-36) amide containing a  
N $\epsilon$ -(2-{2-[2-(3-maleimidopropylamido)ethoxy]ethoxy}acetyl)  
**lysine** has been synthesized and the resulting **derivs.**  
were bioconjugated to Cys34 of human serum **albumin** (HSA). The  
**GLP-1**-HSA bioconjugates were analyzed in vitro to assess  
the stabilizing effect of bioconjugation in the presence of DPP-IV as well  
as **GLP-1** receptor binding and activation. Compound 9  
(CJC-1131) having the point of attachment to **albumin** at the  
C-terminal of **GLP-1** and a D-alanine substitution at  
position 8 was identified as having the best combination of stability and  
bioactivity.  
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 14 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
AN 2002392634 EMBASE  
TI NN2211: A long-acting **glucagon-like** peptide-1  
**derivative** with anti-diabetic effects in glucose-intolerant pigs.  
AU Ribel U.; Larsen M.O.; Rolin B.; Carr R.D.; Wilken M.; Sturis J.;  
Westergaard L.; Deacon C.F.; Knudsen L.B.  
CS U. Ribel, Pharmacological Research 1, Health Care Pharmacology, Novo  
Nordisk A/S, Novo Alle, DK-2880 Bagsvaerd, Denmark. ulr@novonordisk.com  
SO European Journal of Pharmacology, (13 Sep 2002) 451/2 (217-225).  
Refs: 43  
ISSN: 0014-2999 CODEN: EJPHAZ  
PUI S 0014-2999(02)02189-1  
CY Netherlands  
DT Journal; Article  
FS 003 Endocrinology  
030 Pharmacology  
037 Drug Literature Index  
LA English  
SL English  
AB **Glucagon-like** peptide-1 (**GLP-1**) is  
an effective anti-diabetic agent, but its metabolic instability makes it  
therapeutically unsuitable. This study investigated the pharmacodynamics  
of a long-acting **GLP-1 derivative** (NN2211:  
(Arg(34)Lys(26)-(N $\epsilon$ -( $\gamma$ -Glu(N $\alpha$ - hexadecanoyl))) -  
**GLP-1**(7-37))), after acute and chronic treatment in  
hyperglycaemic minipigs. During hyperglycaemic glucose clamps, NN2211 (2  
 $\mu$ g kg<sup>-1</sup>) i.v.) treated pigs required more (P<0.005) glucose than  
control animals (5.8 $\pm$ 2.1 vs. 2.9 $\pm$ 1.8 mg kg<sup>-1</sup> min<sup>-1</sup>). Insulin  
excursions were higher (P<0.01) after NN2211 (15367 $\pm$ 5438 vs.  
9014 $\pm$ 2952 pmol l<sup>-1</sup> min), and glucagon levels were suppressed

( $P < 0.05$ ). Once-daily injections of NN2211 ( $3.3 \mu\text{g kg}^{-1}$  s.c.) reduced the glucose excursion during an oral glucose tolerance test, to  $59 \pm 15\%$  of pre-treatment values by 4 weeks ( $P < 0.05$ ), without measurable changes in insulin responses. Fructosamine concentrations were unaltered by vehicle, but decreased (from  $366 \pm 187$  to  $302 \pm 114 \mu\text{mol l}^{-1}$ ,  $P = 0.14$ ) after 4 weeks of NN2211. Gastric emptying was reduced ( $P < 0.05$ ) by NN2211. NN2211 acutely increases glucose utilization during a hyperglycaemic glucose clamp and chronic treatment results in better daily metabolic control. Therefore, NN2211, a **GLP-1 derivative** that can be administered once daily, holds promise as a new anti-diabetic drug with a minimal risk of hypoglycaemia. .COPYRGT. 2002 Elsevier Science B.V. All rights reserved.

L11 ANSWER 8 OF 14 MEDLINE on STN  
 AN 2000256912 MEDLINE  
 DN PubMed ID: 10794683  
 TI Potent **derivatives** of **glucagon-like** peptide-1 with pharmacokinetic properties suitable for once daily administration.  
 AU Knudsen L B; Nielsen P F; Huusfeldt P O; Johansen N L; Madsen K; Pedersen F Z; Thogersen H; Wilken M; Agerso H  
 CS Department of Molecular Pharmacology, Health Care Discovery and Preclinical Development, Novo Nordisk A/S, Novo Park, DK-2760 Maaloev, Denmark.. lbkn@novo.dk  
 SO Journal of medicinal chemistry, (2000 May 4) 43 (9) 1664-9. Journal code: 9716531. ISSN: 0022-2623.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200006  
 ED Entered STN: 20000706  
 Last Updated on STN: 20000706  
 Entered Medline: 20000629  
 AB A series of very potent **derivatives** of the 30-amino acid peptide hormone **glucagon-like** peptide-1 (**GLP-1**) is described. The compounds were all derivatized with fatty acids in order to protract their action by facilitating binding to serum **albumin**. **GLP-1** had a potency ( $\text{EC}_{50}$ ) of 55 pM for the cloned human **GLP-1** receptor. Many of the compounds had similar or even higher potencies, despite quite large substituents. All compounds derivatized with fatty acids equal to or longer than 12 carbon atoms were very protracted compared to **GLP-1** and thus seem suitable for once daily administration to type 2 diabetic patients. A structure-activity relationship was obtained. **GLP-1** could be derivatized with linear fatty acids up to the length of 16 carbon atoms, sometimes longer, almost anywhere in the C-terminal part without considerable loss of potency. Derivatization with two fatty acid substituents led to a considerable loss of potency. A structure-activity relationship on derivatization of specific amino acids generally was obtained. It was found that the longer the fatty acid, the more potency was lost. Simultaneous modification of the N-terminus (in order to obtain better metabolic stability) interfered with fatty acid derivatization and led to loss of potency.

L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:677200 CAPLUS  
 DN 135:50956  
 TI Oral delivery of glucagon-like peptide-1 in a modified polymer preparation normalizes basal glycemia in diabetic db/db mice

AU Joseph, J. W.; Kalitsky, J.; St-Pierre, S.; Brubaker, P. L.  
 CS Department of Physiology, University of Toronto, Toronto, ON, Can.  
 SO Diabetologia (2000), 43(10), 1319-1328  
 CODEN: DBTGJ; ISSN: 0012-186X  
 PB Springer-Verlag  
 DT Journal  
 LA English  
 AB The insulinotropic hormone, **glucagon-like** peptide-1 ( **GLP-1**) has been proposed for the treatment of patients with Type II (non-insulin-dependent) diabetes mellitus. As **GLP-1** is rapidly cleaved at L-ala2 by dipeptidyl-peptidase IV, **D-ala2-GLP-1** was synthesized and shown to have dipeptidyl peptidase IV resistance in vitro and enhanced bioactivity in mice during an oral glucose challenge. The actions of **D-ala2-GLP-1** were, however, lost within 4 h of injection, thus necessitating frequent and invasive treatment if it is to be used therapeutically. To circumvent this problem, a microsphere of **D-ala2-GLP-1** that could be given orally was developed. We encapsulated **D-ala2-GLP-1** in poly(lactide-co-glycolide)-COOH with olive oil as a filler, using phase inversion. The microspheres were tested in vivo by oral gavage in mice at t = 0 h followed by repeated oral glucose tolerance tests at t = 0, 4 and 8 h. The **D-ala2-glucagon-like** peptide-1-microspheres lowered the glycemic response to the 4 h oral glucose challenge in both normal CD1 and diabetic db/db mice, by  $41 \pm 12 \%$  ( $p < 0.001$ ) and  $27 \pm 5 \%$  ( $p < 0.001$ ), resp. and by  $19 \pm 11 \%$  ( $p < 0.05$ ) and  $28 \pm 4 \%$  ( $p < 0.001$ ), resp. during the 8-h test. At 4 h after the oral gavage, basal glycemia in the diabetic mice was reduced from  $13 \pm 1$  mmol/l to  $10 \pm 1$  mmol/l and was reduced further 8 h after treatment from  $12 \pm 1$  mmol/l to  $8 \pm 1$  mmol/l ( $p < 0.05$ ). Giving **D-ala2-GLP-1** alone orally had no effect on glycemia. The data presented here suggest that a similar microsphere preparation could be useful in the delivery of **GLP-1** to patients with Type II diabetes.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:613694 CAPLUS

DN 131:248241

TI Stabilized aqueous peptide solutions

IN Kaarsholm, Niels C.

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9947160	A1	19990923	WO 1999-DK115	19990308
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AU 9926125	A1	19991011	AU 1999-26125	19990308
EP 1061947	A1	20001227	EP 1999-906095	19990308
EP 1061947	B1	20040616		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2003526599	T2	20030909	JP 2000-536399	19990308
AT 269103	E	20040715	AT 1999-906095	19990308
PRAI EP 1998-610006	A	19980313		
US 1998-78422P	P	19980318		
WO 1999-DK115	W	19990308		

AB Aqueous compns. comprising at least one peptide selected from glucagon, **GLP-1**, and analogs and **derivs.** thereof together with a stabilizing and solubilizing amount of at least one detergent, said detergent having at least 2 pos. charges, at least 2 neg. charges, or a combination of at least one pos. charge and at least one neg. charge.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:290631 CAPLUS

DN 124:307606

TI Glucagon-like insulintropic peptide analogs and their use in diabetes treatment

IN Chen, Victor John; Dimarchi, Richard D.; Kriauciunas, Aidas V.; Smiley, David L.; Stucky, Russell D.

PA Eli Lilly and Co., USA

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 708179	A2	19960424	EP 1995-307299	19951013
	EP 708179	A3	19960828		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	US 5512549	A	19960430	US 1994-324960	19941018
	NO 9504055	A	19960419	NO 1995-4055	19951012
	EP 1227151	A1	20020731	EP 2002-257	19951013
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV				
	ZA 9508723	A	19970416	ZA 1995-8723	19951016
	CA 2160753	AA	19960419	CA 1995-2160753	19951017
	FI 9504941	A	19960419	FI 1995-4941	19951017
	AU 9534322	A1	19960502	AU 1995-34322	19951017
	HU 73413	A2	19960729	HU 1995-3001	19951017
	CN 1129224	A	19960821	CN 1995-119955	19951017
	JP 08245696	A2	19960924	JP 1995-268363	19951017
	BR 9504452	A	19970520	BR 1995-4452	19951018
PRAI	US 1994-324960	A	19941018		
	EP 1995-307299	A3	19951013		

OS MARPAT 124:307606

AB **Glucagon-like** insulintropic peptide (**GLP-1**) (7-37) analogs and **derivs.** are disclosed. The analogs include amino acid substitutions, amino and carboxyl terminal modifications and C6-C10 acylations on the **lysine**  $\epsilon$ -amino group. The claimed compds. stimulate the secretion or biosynthesis of insulin in poorly functioning beta cells and are therefore useful in treating Type II diabetics. **GLP-1** analogs were prepared and tested in dogs and rats, e.g. in hyperglycemic clamp

studies and in glucose tolerance tests. These analogs persisted in the serum for longer periods of time than **GLP-1**(7-37).

## WEST Search History

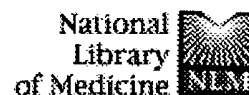




DATE: Thursday, September 09, 2004

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L11	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (D-Ala\$8)	45
<input type="checkbox"/>	L10	L9 and (conjugat\$ or bind\$ or attach\$ or bond or bound) same ((blood or serum) adj protein or albumin)	7
<input type="checkbox"/>	L9	L8 not l4	71
<input type="checkbox"/>	L8	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (derivative or MPA or maleimid\$) with (conjug\$ or attach\$ or link\$ or bind\$)	82
<input type="checkbox"/>	L7	l4 not l6	19
<input type="checkbox"/>	L6	l4 and L5	17
<input type="checkbox"/>	L5	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (derivative or MPA)	580
<input type="checkbox"/>	L4	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (conjugat\$ or bind\$ or attach\$ or bond or bound) same ((blood or serum) adj protein or albumin)	36

END OF SEARCH HISTORY



Entrez PubMed Nucleotide Protein Genomes Structure OMIM PMC Journals Br  
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- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

Search	Most Recent Queries	Time	Result
<a href="#">#19</a>	Search (GLP-1 or glucagon-like) AND derivat* Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:10:07	<a href="#">2</a>
<a href="#">#18</a>	Search (GLP-1 or glucagon-like) AND derivat* Field: Title, Limits: Publication Date to 1999/10/15	18:09:58	<a href="#">1</a>
<a href="#">#11</a>	Search #10 AND #6 Field: Title, Limits: Publication Date to 1999/10/15	18:08:03	<a href="#">122</a>
<a href="#">#13</a>	Search #10 AND D-Ala* Field: Title, Limits: Publication Date to 1999/10/15	18:06:13	<a href="#">0</a>
<a href="#">#10</a>	Search GLP-1 or glucagon-like Field: Title, Limits: Publication Date to 1999/10/15	18:04:40	<a href="#">755</a>
<a href="#">#9</a>	Search GLP-1 or glucagon-like Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:27	<a href="#">1256</a>
<a href="#">#8</a>	Search (GLP-1 or glucagon-like)[ti] AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:11	<a href="#">0</a>
<a href="#">#7</a>	Search (GLP-1 or glucagon-like) AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:01	<a href="#">242</a>
<a href="#">#6</a>	Search (GLP-1 or glucagon or insulinotropic) AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:03:42	<a href="#">2621</a>

Clear History

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